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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,743	08/10/2001	Kenji Hagiwara	107101-00034	6655

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EXAMINER

SAXENA, AKASH

ART UNIT PAPER NUMBER

2128

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/925,743	<b>Applicant(s)</b> HAGIWARA ET AL.	
	<b>Examiner</b> Akash Saxena	<b>Art Unit</b> 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-30 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-30 and 32-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claim(s) 1-13, 15-30 and 32-34 have been presented for examination based on amendment filed on 17<sup>th</sup> October 2005.
2. Claim(s) 5 is amended.
3. Previous non-final office action mailed on 19<sup>th</sup> July 2005 is incorporated within this office action unless otherwise specified where the more current rejection for the amended claims supercedes the previous rejection.
4. The arguments submitted by the applicant have been fully considered. Claims 1-13, 15-30 and 32-34 remain rejected. The examiner's response is as follows.

***Response to Applicant's Remarks & Examiner's Withdrawals***

5. Examiner respectfully withdraws the objection(s) to specification (abstract) in view of the amendment to the abstract.
6. Examiner respectfully withdraws the claim objection(s) to claim(s) 5 in view of the amendment. Objection to the ineffective incorporation is also withdrawn in view of amendment to the specification. Claim objection to the claims 6 and 23 are maintained.

***Response to Applicant's Remarks for 35 U.S.C. § 103***

7. Claims 1-13, 15-30 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over article Hong '1998 in view of lizuka '188.

**Regarding Claims 1 & 12**

Applicant argues that Hong '1998 merely teaches a control design of gasoline engines with an automatic transmission and fails to disclose first simulator as claimed. Examiner respectfully disagrees with the applicant as Hong '1998 clearly teaches a Automatic transmission control system estimating an effective hydraulic pressure based on the hydraulic pressure supply command (Hong '1998: Pg.113) which estimates the hydraulic pressure in various profiles (Hong '1998: indicated by the Eqs.3 (a-c)).

In regards lizuka '188 reference, applicant argues that lizuka '188 merely teaches method and system of controlling shift in the automatic transmission and does not concern with simulator of shift control system. Hong '1998 addresses this limitation relating to simulator of shift control system (Hong '1998: Abstract). Although the lizuka '188 reference was used to cure the deficiencies of Hong '1998, it also substantially teaches in a system format the algorithmic steps recited in claim 1 (Eg. Hydraulic pressure command to predict the pressure (lizuka '188: Fig.1)). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Portions of the claims 1 & 12 are merely restated without specifically pointing out how the first simulator section is novel from disclosed prior arts.

Although, in claim 1, the intended use under the "wherein the second simulator [...]" is clearly addressed in the Hong '1998, it does not carry patentable weight as the method/algorithm steps of the claim 1.

Regarding Claim 1, 7, 12, 18, 24 and 29

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant's argument regarding establishing a prima facie case of obviousness are considered and are found to be unpersuasive. Portions of the claims 1, 7, 12, 18, 24 and 29 are merely restated without specifically pointing out how the claimed invention is novel from disclosed prior arts.

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Regarding Claim 2-6, 8-11, 13, 15-17, 19-23, 25-28, 30, 32-34

Claims 2-6, 8-11, 13, 15-17, 19-23, 25-28, 30, 32-34 depend from their respective rejected claims 1, 7, 12, 18, 24 and 29 and are rejected based on their dependencies on these respective claims.

**8. Rational for combining Hong '1998 and Iizuka '188:**

The examiner contends that the motivation to combine Hong '1998 and Iizuka '188 is proper and in accordance with MPEP guidelines for the following reasons. MPEP 2143.01 Suggestion or Motivation To Modify the References first recites:

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998)

In this case the examiners rejection first addresses the nature of the problem to be solved, namely, simulating the shift control algorithm with prediction of hydraulic pressure, relative to the teachings in the prior art.

Prior art, Hong '1998 clearly teaches a Automatic transmission control system estimating an effective hydraulic pressure based on the hydraulic pressure supply command (Hong '1998: Pg.113) which estimates the hydraulic pressure in various profiles (Hong '1998: indicated by the Eqs.3 (a-c)). Prior art, Iizuka '188 also clearly is concerned with accurate prediction and correction of the hydraulic pressure (Iizuka '188: Fig.1).

Teaching of Hong '1998 and Iizuka '188 clearly point to modification and combination with each other and are not provided as a suggestion that these references can be arguably combined. For example Hong '1998 clearly teaches that

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the simulator model shown can be run with the real time control (system) and hardware-in-loop simulation (Hong '1998: Pg. 117 Conclusions). On the other hand, lizuka '188 clearly uses a learning control (modeling and prediction component) to predict and correct the hydraulic pressure (lizuka '188: Fig.1 Elements 13 & 26).

*Applicant's argument regarding establishing a prima facie case of obviousness are considered and are found to be unpersuasive.*

Further, MPEP 2144 Sources of Rationale Supporting a Rejection Under 35 U.S.C.

103 recites:

"The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See also In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (setting forth test for implicit teachings); In re Eli Lilly & Co., 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) (discussion of reliance on legal precedent); In re Nilssen, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings)"

The examiner has simply asserted that a skilled artisan tasked with solving the problem of modeling a simulator (i.e. as taught by Hong '1998) to predict (and or correcting) the hydraulic pressure during the shifting of gears in an automatic transmission would have to use a reference value and a measured value and some model to converge the two values (i.e. as taught by lizuka '188). Specifically, a skilled artisan working in this obviously competitive environment would have made an effort to become aware of what capabilities had already been developed in the market place, and hence would have been aware of, and known to seek out the relative teachings of the problem to be solved. Namely, the teachings of Hong '1998 and lizuka '188.

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MPEP 2143.01 Suggestion or Motivation To Modify the References further recites the following supporting rational:

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. **"The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art."** In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

The examiner therefore appears to have established an implicit showing that in view of the combined teachings of the prior art, the relative knowledge of one skilled in the art, and in particular, the nature of the problem to be solved, there exists an obvious motivation to combine the references as noted above.



***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

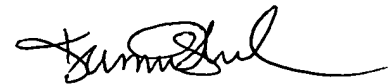
***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 9:30 - 6:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Monday, December 26, 2005



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